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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,545	03/01/2001	Thomas Jung	65243-001	2852

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EXAMINER

PADGETT, MARIANNE L

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 03/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/743,545

Applicant(s)

JUNG, THOMAS

Examiner

Marianne L. Padgett

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-31 and 33-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-31 & 33-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/9/03 has been entered.

2. Claims 20-31 and 33-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrasing “exposed to...” or “exposed on all sides to the electrically conductive material...” (claim 20, lines 7⁺ and 16-17), or analogous language in the last 2 lines of claim 29, is non-idiomatic English, which makes the intended meaning and intended scope unclear. This may come from a translation problem, but while something may be exposed to view by there being no intervening objects or material, for the claimed structure to be “...exposed to...” support or objects as claimed can literally mean that they are required to be touching which would be contrary to other limitations requiring electrically insulating. The examiner suspects that the correct idea for applicants’ intent may include --in direct line-of-sight--, but applicant’s have not pointed out their support in the original specification for this modification of the claims, so this guess is not based on applicant’s disclosure. In review of the specification, the “exposed to” language was not found, hence cannot be properly interpreted in view of the specification. A teaching that might relate to applicant’s instant (page 2, has 28-31) has the entire structure formed of coating material or targets arranged on [all] inner walls, which would be similar to

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what might be intended, but the electrically conductive material of the independent claims, is not necessarily coating material.

3. Claims 20-31 and 33-38 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. As noted above, when 2 objects or things are described as being exposed to each other, they must be able to touch, but this would short out the apparatus (as well as contradict the electrically insulting limitation), hence make the apparatus and method inoperative, as written.

4. Claims 20-31 and 33-38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The lack of support for possible meaning of the new claim language, makes it included New Matter.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 20-21, 23-25, 28-31 and 38 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over E. Kay as discussed in paper # 7 (mailed 4/9/03), section 5.

As the meaning of the new language is uncertain, this rejection is being applied as a 102/103. The examiner notes the presence of dielectric plates 66, 60' shown in Fig. 4 on the top and bottom insides of the conductive box structure made of endplates 58, 58' and cathode wall 40, so while the dielectric covers present electric discharge between the container and the substrate being treated (col. 9, lines 2-14), the end plates "extend the effective cathode surface electrically, preventing undesirable sharp field gradients at the cylinder edges". As noted above, the meaning of "exposed to" can not be literally true, but the specification does not define what it does necessarily mean, however as the purpose of the cathode is to create plasma and electrically fields, etc., the end plate portion of Kay's box structure still contribute to this, and the substrate object is still "exposed to" those electrical results, even if it is prevented from having direct electrical discharges between upper/ lower walls and object. Nether do such discharge occurs between the cathode wall 40 and the object. Presumably, the dielectric is used on the ends due to closer distance.

While applicant probably had something more than above in mind, clear definition of intent, with shown support from the specification is needed to determine what it necessarily is, and its limits.

7. Claims 26-27 and 35-37-are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay, as analogously rejected over related dependant claims in section 3 of paper # 7.

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8. Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay as applied to claims 20-21, 23-32 and 35-38 above, and further in view of Boehnke et al as discussed in section 6 of paper # 7.

9. The noted significance (section 7 of paper 7) of Henshaw or Shenmi et al remains relevant.

10. Claims 22 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay as applied to claims 20-21, 23-32 and 35-38 above, and further in view of Kugler as discussed in section 8 of paper # 7.


11. Applicant's arguments filed 9/9/03 and discussed above have been fully considered but they are not persuasive.

12. Any inquiry concerning this communication should be directed to Marianne L. Padgett at telephone number (571) 272-1425 on M-F from about 8:30 am - 4:30 pm, & FAX#(703) 872-9306 (all official).

M. L. Padgett/af

March 1, 2004

March 9, 2004



MARIANNE PADGETT
PRIMARY EXAMINER